SEQUENCE LISTING

<110>   DNAPrint Genomics, Inc.
        FRUDAKIS, Tony N.

<120>   METHODS AND COMPOSITIONS FOR INFERRING EYE COLOR AND HAIR COLOR

<130>   DNA1180-1WO

<150>   US 60/548,370
<151>   2004-02-27

<150>   US 60/544,788
<151>   2004-02-13

<160>   48

<170>   PatentIn version 3.3

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acaaaatgag gtgacaaaag ctttactgga agctaaattc cacaataaaa ttcaacttaa   540

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ctctaatgag aacacacaga cacagacaca gaggcaggat ttttgtcctt gataaacaca     180

agtaccagtt acccaggctg tccctgaat gccagctcat tcacattcta aagcactcac      240

attgtcagag aaagacagtg gcaggctgag ctcccgggat ggactgagag acagctgcat     300

cgatgcacat gccctgagca cactcaagta tggtctctgt ggccttggga gtggcggact     360

ggactgagct ctgccccgag gactgcacag gctcatggag aatacagctc acatacaact     420

gccgtgatgg acctgtgacg gctatgctag cctcacacac caaggtatca tagggtctc      480

tcagctaaat ccatacnctt gctgaggcca tggggaacc aaccagagct taactgaaca      540

ttggagctct tctgtggtct caagcatctt t                                    571


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tggctgtaga atctggtacc tgatgtcatg ctgtgaatgt tagcaggctc agggtgcctg     180

gcagggagca gccgtgataa gtggcttagc acagggacc cagcatgcag tttagggtca      240

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atggaagcca ctttctttgc aatcgtcagg caaactccag aggaacaggg nagacgatcg     180

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ttgctggcct cagagctaat caacccaaat gcaaatccac aagttaaaaa gggaaatcag     180

tagaagctgg tggggaaaca tgagaataaa tccataaacc cccaaaataa ttccacccca     240

tcagatactc tataaactgt gaatagatgc aaagcaaata atgacactac gatacgatgt     300

aaaactagaa tactatttct gcattttcac agaggtctaa tgccctgcat taagcaagct     360

cacaggcttc gacaaaattc caaattgaga aatgttaaat tttgcaattc tgtattttat     420

cagaatgtta ccataattc ctcaatgggt actggcccag gtgctgttct aggaaggggg     480

taatggacag gtgagttgct ggcctatccc cttactcagg cacgtaagac tcngtgagca     540

agtataacgc aaggtgaaga ccgtagaagc agacagggat ggcgatggca atgactgcgc     600

tgccaggtaa ggcttcacag ag                                            622


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<223>  n is a or c

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gcagggctgc tgggctggga ggagactgtg cctcagggaa aaggcgaggc tgccttggta      180

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ccatttaaca aagcagagtt tcagacaggg tgtgaggctt ccagagagac atttaacatt      300

cactgagctt caggagagct gaccacccca agccaaggcc aacactgcct agtgtcctca      360

ctaagcaanc cctcaggaca caggttccaa ctcagccact gagggagaga gagacaaggc      420

ggtgtcagtg tccttcatag agaaggagcg aatgtctggg ttggctgctc ccagattcct      480

tagctgggaa ctctgagcac acattctttt cagagatgac catagggtcc ttctcagggc      540

atgcttcagt gccatgagta gaacatccat actggatttt tttatttaaa aaatgt          596
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<213>   Homo sapiens  1879    OCA2-rs895828


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<223>   n is g or c

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gttcatgacc cttccaaact tggaatcatg cagggatcaa cctcagtcta gctctgagca      120

ttgctggcct cagagctaat caacccaaat gcaaatccac aagttaaaaa gggaaatcag      180

tagaagctgg tggggaaaca tgagaataaa tccataaacc cccaaaataa ttccaccccca     240

tcagatactc tataaactgt gaatagatgc aaagcaaata atgacactac gatacgatgt      300

aaaactagaa tactatttct gcattttcac agaggtctaa tgccctgcat taagcaagct      360

cacaggcttc gacaaaattc caaattgaga aatgttaaat tttgcaattc tgtattttat      420

cagaatgtta ccaataattc ctcaatgggt actggcccag gtgctgttct aggaaggggg      480

taatggacag gtgagttgct ggcctatcnc cttactcagg cacgtaagac tccgtgagca      540

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tgccaggtaa ggcttcacag ag                                               622
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cttttgatgaa tggctgagga gatacaatgc tggtaagaca ttttcatatg cnttttgcat   180

gctcagctgg gcrgattgtt tagatggcat agttatcagt tcaagctgag cactcagcgc   240

ataaaaacac tttcaaaata agg                                           263


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ccattgaaaa gattctgaaa gggtcttccc agctttgaaa agtatgccta gaactttaat   180

nctaacatat gcttgtatta gaaagaaggt aataaagtga aagaaaatac agttaataac   240

tcaatctatt atattcaacc aggtggtttt gtgatactaa tgcataagag agtagggcat   300

ttgttagacc acagactgat t                                             321


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ttatctgatt cgtgccagac gcagtatgga tgaagctaac cagcctctcc tcactgatca   180

gtatcaatgc tatgctgata tgaaaaactc cagaatccta atcagtctgt ggtctaacaa   240

atgccctact ctcttatgca ttagtatcac aaaaccacct ggttgaatat aatagattga   300
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gttattaact gtattttctt tcactttatt accttctttc taatacaagc atatgttagn    360

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aatacatgaa tgggcatttc taaaatgtta aaacataaac wcatttccat tcatggatat    660

ttgtcaacag atttaaagaa aaccacagtt attaattaaa gaaaattaat tatgtgtagt    720

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aatggtgcaa aactgtgcgt gatgtactga aagatcagag ggatagggca aggcacngac    180

agagtctgct atgattgtaa caggaggagg tagaaattaa acaggaatgg tgactccata    240

taatttggct tcctatttct gtgactctac acactgaaga tatcaatcaa atcatagagt    300

gctattttaa atagaaggaa gctcaatttt caatcacata taactgaaac catagtataa    360

cttttaagt attttaattc gtgctgtttg gggtattcaa atatatcctg aatttaaact    420

atagtaaccc tgaacccagt attcatttgc aaaaactatc aacatctaca tgattaaata    480

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agagtgtacc atcaaagctg gatgggtgcg gtaaatggtc cgctggagag cactttgttt     180

gaatgggtgt gtggtagtgg cgaggaggcg agttgcagag gtggccccct aacacaacct     240

atttctcatc ctccctcgct atcaacaccc tggcattagt aggtgaaaaa gatgatcaca     300

gttgggaaaa tagagaacaa atcatgcttt atgccccagt gctngtctgg tctaagctgg     360

ggaggtgaga agctctaaat ttaaatcagg ttagacttaa taatagtcta aagtttacca     420

caggtgaaac aaatgtctaa agatgggtaa agaaacatgg ctgaatgctt taaaacagat     480

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atcaactggc atgttcaacc tccagatgtg ggctcacttg caaaatgcaa ttctgggagt     180

agctgtttga gttattgtaa ctgggactga tctgggcctc ttttgaaggg tatgctgcag     240

tcgatagcaa ttttcattgt cttggtgtat ggggtgtgag tgtctggata ataggtctgc     300

aggatagtaa aaataatgat tttttcttga ttataagtta cctttgaaat acatatgatt     360

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agttggcttc aagacanatt taagagataa gacggaaata atgtggtgac caagagggta    180

tgagtagacg agaaactgac aatatctatg ggtatctcct ccatcttgcc atcataccaa    240

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ggtgttccag tgtgcttacc agagcactca ctcgccggtg ggcagggaaa tgccgtggga    120

ggcagcagca cagattcttc tgtcttttat ccacagcaaa aatacccanc agtgacaaca    180

tccagtgctg atgggcaggc aggaggacca ggtca                              215


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ccattgttct agatgggaga taaaacagcc taactctagc tggatgctca gtccaaactc    120
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actcactgta gcttgatggt tcatatagat ttgagattac caaaatgtta ttcaacattc        300

atactagatg gtcttganta tacttcaaat tcagcatgtt ctcatctgaa ctcacatctc        360

aacatcacca cactgtccct ttcctttttc ttatattttc agagtatcag tataaatctc        420

attgcaccag gcagaatctg aggagaaatc cttgcagctc cttcttcctg attcatcatc        480

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ancataggcc cacgctgaac tggtaattgt ggcagtggga aagacatgca cttcttggtt        180

tagagtccag aggtttccat cttacgctga gaatgggtta cacatgtaga gatattgatc        240

ccttcaggcc ttagggctgc cattttttct tgccccaaag ccactgtcgc atctcgccag        300

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gcaaatgtat taccctcttt cagaatgaca caggaagcag gtactacaag gtaagagtgg   180

gctctttctt tgtagtttca tacctcttat tgcttttttcn tgggaatgta gagtataaga   240

aataggaaat acatccaaca aacgtggcta tttttgtgct tcctccagga actatttttt   300

ttttcttctc tatagtctac aaatttcttg ggattcaggt tgggacctct tgattcttct   360

gtgaatttta aatttccctg gggagtgttt ctggtaccat gggatgatgg gagagggagg   420

gaggtgaaga ttaattgaat atgttagcag agaagtgtga tttaactaga aaattaatgg   480

tcacagcaga tcagctcaaa gtaaactcct gatatccact gcatctagca cactgct   537

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agtagcccca tttgtggag ggagagacta aaccacagag agtccatccc aggacctggg   120

aggaacaaag ctgggattta aggccaggca gcttgggacc ctaagccaat gtgtgtantc   180

cttgtgacct actgcctttc tgctaagctc ctggggcccc atcattgacc tgcagacaga   240

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tcacaaggaa caatcagact atagagaggt gtgtgctttt tctgtagtca ataagactg   180

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nnnnnnnnnn ntcatcagtg tgcacnttat cccactccac cccatctcac cagagttgtg   180

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aggctaccca gggagaaggg agaagaaagg ggaagaaaga aattgcaaaa gattatttcc      240

ttaaaattga ttagaaaaaa attcatctaa tccagataag tatctttgag tgaaaaataa      300

ctatatgttg tctgcttcaa aattttactg tgtaaatatt aacatattga atattgggtg      360

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<223>   n is a or g

<400>   24
atttcagaga gcactcgatg ctcccaaaag aagaagttga cagagcccac gtcccctcag       60

cccttcacac agcctcccct tgtcttcctc tcctactcag cactgtggct gcactaggac      120

ccctcatgat gaccaagatc ctcataaaga ggacaagaag ttcatccagt accagtcagg      180

ccaatatccc aaaattagca taactgncag aaatgcagag gcatcaacaa ctcctcttga      240

caacagggtt ggtagaagaa tcaagggcct aattttgatg cctggcacag gttatgggag      300

cagcagagta                                                             310
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<210>   25
<211>   431
<212>   DNA
<213>   Homo sapiens   RS726865


<220>
<221>   misc_feature
<222>   (337)..(337)
<223>   n is c or t

<400>   25
agggcaatga tgagctagcc tgtaattatc agtgcctata tcctctctac agcttgtagg       60

gacatatatt attatgttaa aaaaaaaaa gcaatatgag gcttgttagt gcttggaagt      120

atacaagaca tacttccaag ttacaaagac atacttccaa gttacaaaga catacttcca      180

agtatgaaca aaacaaacac atgcgtccct tgtggcagag cagagctggc ccttccccag      240

atgacacacc tcagggactt caccttatac cttgcagtgt tctgtatttg gttttccatg      300

tgaggcagca acgggttcaa agagagacca tctgagnaca agtgatgggc gtggcacatc      360
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caggggagatc aagaaccagg ccagatgcag agacctgacc tgtgagccaa gtctgggcac   420

ctgaatctag a   431

<210> 26
<211> 41
<212> DNA
<213> Homo sapiens

<220>
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<223> n is c or t

<400> 26
tatctaaccc tcactgagct ntgcaggggg tacacagccg a   41

<210> 27
<211> 41
<212> DNA
<213> Homo sapiens

<220>
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<222> (21)..(21)
<223> n is c or t

<400> 27
cacatgttca ttgggatttg ncttgttctc ctggtctgct t   41

<210> 28
<211> 41
<212> DNA
<213> Homo sapiens

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<223> n is a or g

<400> 28
cttgtcttct tcttttcccc ntagatgatc ttagtagcca t   41

<210> 29
<211> 41
<212> DNA
<213> Homo sapiens

<220>
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<222> (21)..(21)
<223> n is a or g

<400> 29
gtgcatgaaa aggtgggggc ngttgagccc acagctcact g   41

<210> 30
<211> 41
<212> DNA
<213> Homo sapiens

<220>
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<222> (21)..(21)
<223> n is a or c

<400> 30
gtgaaataat ttccatgatt ncttcctaaa tattgaatat a   41

<210> 31
<211> 41
<212> DNA
<213> Homo sapiens

<220>
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<223> n is g or t

<400> 31
cagtgtgaac tgtgtaggtt ntgtgtggtc ccctgtgcct g   41

<210> 32
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<212> DNA
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<220>
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<222> (21)..(21)
<223> n is g or t

<400> 32
atgaaaaaaa agttgttgtt nttttttttt ttcctatttt t   41

<210> 33
<211> 41
<212> DNA
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<220>
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<223> n is g or t

<400> 33

atgtctgtgt gtgtgcacca ntgtgaactg tgtaggttgt g   41

<210>   34
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<212>   DNA
<213>   Homo sapiens

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<400>   34
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<210>   35
<211>   41
<212>   DNA
<213>   Homo sapiens

<220>
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<222>   (21)..(21)
<223>   n is a or g

<400>   35
ccaggcatac cggctctccc nggacgggt gtgggccatg a   41

<210>   36
<211>   41
<212>   DNA
<213>   Homo sapiens

<220>
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<400>   36
gtcagtgaaa catccccaaa nggtaagctt cagcattgtc c   41

<210>   37
<211>   51
<212>   DNA
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<220>
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<223>   n is g or c

<400>   37
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<210>  38
<211>  41
<212>  DNA
<213>  Homo sapiens


<220>
<221>  misc_feature
<222>  (21)..(21)
<223>  n is a or c

<400>  38
gatgttatat gttttgaaag nagaaatact tcaattagta a                          41


<210>  39
<211>  41
<212>  DNA
<213>  Homo sapiens


<220>
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<222>  (21)..(21)
<223>  n is a or g

<400>  39
gtggcccaca gtgagtgctt nggacatctg gatgcagcta t                          41


<210>  40
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<212>  DNA
<213>  Homo sapiens


<220>
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<223>  n is a or g

<400>  40
atcgtgcaca gaactctggc ngccatgctg ggttcccttg c                          41


<210>  41
<211>  41
<212>  DNA
<213>  Homo sapiens


<220>
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<222>  (21)..(21)
<223>  n is a or t

<400>  41
taaaatgtta aaacataaac ncatttccat tcatggatat t                          41
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<210>  42
<211>  41
<212>  DNA
<213>  Homo sapiens


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<400>  42
cactgggatc tgcctgtgac nctcttgtgg ggcctggtcc c                    41


<210>  43
<211>  41
<212>  DNA
<213>  Homo sapiens


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<400>  43
gaagttaaaa cattgttagt naattctggg tgaatggatg g                    41


<210>  44
<211>  41
<212>  DNA
<213>  Homo sapiens


<220>
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<400>  44
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<210>  45
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<220>
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<400>  45
atatctctga atcctaatga nagcagaaac atgttaatga g                    41
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<210>  46
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<220>
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<400>  46
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<210>  47
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<212>  DNA
<213>  Homo sapiens


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<400>  47
tcatgggttt tgtgagtgta ngcatgcttt agaagagctc t                    41


<210>  48
<211>  41
<212>  DNA
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<220>
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<223>  n is c or t

<400>  48
tagactagaa atgagcccag ntgaacactc tatatgaaaa a                    41
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